

MRI FLEX CIRCUIT CATHETER IMAGING COIL

ABSTRACT

A method and structure for a radio frequency receiver coil adapted to be extended from a catheter. This coil comprises a flexible printed wiring board that has a first end and a second end extending from the opening in the catheter and a connection external to the catheter joining the first end to the second end to form a loop. The flexible printed wiring board also includes shielding circuitry (e.g., a Faraday shield) on the flexible printed wiring board. The first end is more flexible than the second end and the relative flexibility of the first end with respect to the second end causes the first end to take the shape of a round arc when extended from the catheter. In addition, insulator sections on the flexible printed wiring board define the shape of the loop. Independently moveable control rods are connected to the first end and the second end, to allow the first end to be extended further out of the opening than the second end (to form the loop).